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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,001

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William C. Phillips

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EXAMINER

FLORY, CHRISTOPHER A

ART UNIT

PAPER NUMBER

3762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/693,001

Applicant(s)

PHILLIPS ET AL.

Examiner

Christopher A. Flory

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/30/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 7, 18-20, 23, 25, 27 and 29 stand rejected under 35 U.S.C. 102(b) as anticipated by Cimochoowski et al. (US Patent 5,967,986, hereinafter Cimochoowski'986) or, in the alternative, are rejected under 35 U.S.C. 103(a) as obvious over Cimochoowski'986 in view of Tiefengraber (US 5,172,110, hereinafter Tiefengraber'110) or in view of Wallerstorfer et al. (US 5,478,995, hereinafter Wallerstorfer'995) or in view of Hagfors (US 3,796,221, hereinafter Hagfors'221).

In reference to claims 1, 4, 18, 25, 27 and 29, the Cimochoowski'986 patent teaches a signal transfer unit (see abstract) enabling transfer of physiological data from a physiological sensor attached to a mammalian subject in use (which includes both internal and external devices), to a remote base station (see abstract and fig. 12). According to the Webster's II New Riverside University dictionary the ring like structure of figures 12 within the Cimochoowski'986 patent fit the definition of both a channel and an aperture because an aperture is defined as *an opening as a hole gap or slit*, and a

Art Unit: 3762

channel is defined as *a course through which something can be directed or moved*, and though such a ring was not constructed to, it is still capable of holding a portion of clothing associated with a patient due to the fact that the clothing can be placed within the opening, and in turn hold the ring shaped antennae in a relatively fixed position relative to an implanted medical device. The Cimochoowski'986 patent teaches the use of a cable or cord of some sort to connect the coil with the power supply and monitoring cable (see fig. 12).

The ring shaped antenna of figure 12 inherently possesses a wide end that can be used for the insertion of clothing. Because the opening of the coil can be defined as both a channel and an aperture, if the coil of the device were held vertically then rotated about its vertical axis, the channel/aperture of the device would appear to be much thinner than the channel/aperture of the coil that is not rotated. Alternatively, in the same problem solving area, both Tiefengraber'110 and Wallerstorfer'995 teach antenna tags wherein an aperture comprises a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position (**Tiefengraber'110**: Fig. 1, aperture 15; column 3, lines 5-15; **Wallerstorfer'995**: Fig. 10, aperture 47, or alternatively any of the fastening mechanisms in Figs. 3, 6, 11, 21; column 6, lines 44-66). In the same field of endeavor, Hagfors'221 shows an antenna attached to an external device and placed substantially in a fixed position relative to an implantable device that comprises a wide end and a narrower channel adjacent capable of holding a portion of an item of clothing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

Art Unit: 3762

invention to modify the system of Cimochoowski'986 with the antenna aperture capable of holding an article of clothing as taught by any of Tiefengraber'110, Wallerstorfer'995, and Hagfors'221 in order to provide the Cimochoowski'986 system with the same advantages of holding an antenna in a substantially fixed position.

In reference to claims 2 and 19, the ring shaped antenna of figure 12 inherently possesses a wide end that can be used for the insertion of clothing.

In reference to claims 7 and 23, referring to an object or orifice, as being teardrop shaped is quite broad considering the fact that a teardrop can be a multitude of shapes considering its environment. Teardrops can appear to be circular, similar to the coil of the Cimochoowski'986 patent, in many environments.

In reference to claims 3 and 20, because the opening of the coil can be defined as both a channel and an aperture, if the coil of the device were held vertically then rotated about its vertical axis, the channel/aperture of the device would appear to be much thinner than the channel/aperture of the coil that is not rotated. The examiner suggests that the applicant alters the phraseology of the claim to state that the thinner channel is disposed next to, above, or beneath the wider aperture, or something of the like.

3. Claims 9, 11, 12, 15, 18-20, 23, 25, 28 and 29 stand rejected under 35 U.S.C. 102(e) as anticipated by Pool et al. (US Patent 6,561,975, hereinafter Pool'975) or, in the alternative, are rejected under 35 U.S.C. 103(a) as obvious over Pool'975 in view of in view of Tiefengraber'110 or in view of Wallerstorfer'995 or in view of Hagfors'221.

In reference to claim 9, the Pool'975 patent teaches a device that is capable of communicating with an implanted device, as well as teaching that the antenna can be housed within a belt (see column 8, lead lines 34-38). Such a housing inherently possesses the ability to have clothing pulled through the channel created by buckling the belt, thereby holding the antenna in a substantially fixed position relative to the implanted device.

In reference to claims 19, 25, 28 and 29, the Pool'975 patent teaches a device that is capable of communicating with an implanted device, as well as teaching that the antenna can be housed within a belt (see column 8, lead lines 34-38). Such a housing inherently possesses the ability to have clothing pulled through the channel created by buckling the belt, thereby holding the antenna in a substantially fixed position relative to the implanted device. The Pool'975 patent teaches a signal transfer unit (see abstract) enabling transfer of physiological data from a physiological sensor attached to a mammalian subject in to a remote device (see abstract). According to the Webster's II New Riverside University dictionary the ring like structure of the belt described within the Pool'975 patent (see column 8, lead lines 34-38) fits the definition of both a channel and an aperture because an aperture is defined as *an opening as a hole gap or slit*, and a channel is defined as *a course through which something can be directed or moved*, and though such a ring was not constructed to, it is still capable of holding a portion of clothing associated with a patient due to the fact that the clothing can be placed within the opening, and in turn hold the ring shaped antennae in a relatively fixed position relative to an implanted medical device. The Pool'975 patent teaches the use of a

Art Unit: 3762

"wand or some other extendible head, containing at least an antenna, is connected to the remainder of the programmer unit via a stretchable coil cable..." (See column 3, lines 6-11). The Pool'975 device inherently possesses a wide end to pull clothing through (see column 8, lead lines 34-38). Because the opening of the belt like housing of the antenna can be defined as both a channel and an aperture, if the belt like housing of the device were held vertically then rotated about its vertical axis, the channel/aperture of the housing would appear to be much thinner than the channel/aperture of the coil when it is not rotated.

In reference to claims 11 and 20, because the opening of the belt like housing of the antenna can be defined as both a channel and an aperture, if the belt like housing of the device were held vertically then rotated about its vertical axis, the channel/aperture of the housing would appear to be much thinner than the channel/aperture of the coil when it is not rotated. The examiner suggests that the applicant alters the phraseology of the claim to state that the thinner channel is disposed next to, above, or beneath the wider aperture, or something of the like.

In reference to claim 15, referring to an object or orifice as being teardrop shaped is quite broad, considering the fact that a teardrop can be a multitude of shapes considering the environment. Teardrops can appear to be circular, similar to the belt like housing of the Pool'975 patent, in many environments.

In reference to claims 12 and 18, the Pool'975 patent teaches a signal transfer unit (see abstract) enabling transfer of physiological data from a physiological sensor attached to a mammalian subject in to a remote device (see abstract). According to the

Art Unit: 3762

Webster's II New Riverside University dictionary the ring like structure of the belt described within the Pool'975 patent (see column 8, lead lines 34-38) fits the definition of both a channel and an aperture because an aperture is defined as *an opening as a hole gap or slit*, and a channel is defined as *a course through which something can be directed or moved*, and though such a ring was not constructed to, it is still capable of holding a portion of clothing associated with a patient due to the fact that the clothing can be placed within the opening, and in turn hold the ring shaped antennae in a relatively fixed position relative to an implanted medical device. The Pool'975 patent teaches the use of a "wand or some other extendible head, containing at least an antenna, is connected to the remainder of the programmer unit via a stretchable coil cable..." (See column 3, lines 6-11).

In reference to claim 23, referring to an object or orifice, as being teardrop shaped is quite broad considering the fact that a teardrop can be a multitude of shapes considering the environment. Teardrops can appear to be circular, similar to the aforementioned belt like housing of the Pool'975 patent, in many environments.

Alternatively, in the same problem solving area, both Tiefengraber'110 and Wallerstorfer'995 teach antenna tags wherein an aperture comprises a wide end and a channel adjacent to the wide end formed to hold a portion of an item of clothing and hold the antenna in a substantially fixed position (**Tiefengraber'110**: Fig. 1, aperture 15; column 3, lines 5-15; **Wallerstorfer'995**: Fig. 10, aperture 47, or alternatively any of the fastening mechanisms in Figs. 3, 6, 11, 21; column 6, lines 44-66). In the same field of endeavor, Hagfors'221 shows an antenna attached to an external device and placed

Art Unit: 3762

substantially in a fixed position relative to an implantable device that comprises a wide end and a narrower channel adjacent capable of holding a portion of an item of clothing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Pool'975 with the antenna aperture capable of holding an article of clothing as taught by any of Tiefengraber'110, Wallerstorfer'995, and Hagfors'221 in order to provide the Pool'975 system with the same advantages of holding an antenna in a substantially fixed position.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 3762

6. Claims 5, 6, 8, 16, 21, 22, 24 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cimochoowski'986, or are rejected over Cimochoowski'986 in view of Tiefengraber'110 or in view of Wallerstorfer'995 or in view of Hagfors'221.

In reference to claims 5, 6, 21 and 22, the Cimochoowski'986 patent discloses the claimed invention except for rubberized grips. It would have been obvious to one of ordinary skill in the art at the time of the invention's conception to modify the antenna of the claimed device with rubberized grips since it is known in the art that rubberized grips can be used to improve the device's portability.

In reference to claims 8 and 24, though the Cimochoowski'986 patent does not teach the use of an insulative telemetry head housing that encases the antenna, the Cimochoowski'986 patent does teach the use of telemetry coil that acts as antennae (see fig. 12) and such housing is common in the art.

Thus it would have been obvious to one of ordinary skill in the art to incorporate such housing into the Cimochoowski'986 invention to protect the coils from damage and as a result of the commonality of said housing in the art.

In reference to claims 16 and 26, the Cimochoowski'986 patent discloses the claimed invention except for a neurostimulator, however the Cimochoowski'986 patent does teach the use of an implanted device in conjunction with an external programming device, and the use of an external programmer in conjunction with an internal device is quite common.

Thus it would have been obvious to one of ordinary skill in the art at the time of the claimed invention's conception to modify the implanted neuralstimulator with an

Art Unit: 3762

external programmer due to the commonality of such a combination and to provide the user with a convenient means for adjusting the stimulation parameters of the implanted device.

7. **Claims 13, 14, 16, 17, 21, 22 and 26 stand rejected** under 35 U.S.C. 103(a) as being unpatentable over Pool'975, or are rejected over Pool'975 in view of Tiefengraber'110 or in view of Wallerstorfer'995 or in view of Hagfors'221.

In reference to claims 13, 14, 21 and 22, the Pool'975 patent discloses the claimed invention except for rubberized grips. It would have been obvious to one of ordinary skill in the art at the time of the invention's conception to modify the antenna of the claimed device with rubberized grips since it is known in the art that rubberized grips can be used to improve the device's portability.

In reference to claims 16, 17 and 26, the Pool'975 patent discloses the claimed invention except for a neurostimulator, however the Pool'975 patent does teach the use of an implanted device in conjunction with an external programming device, and the use of an external programmer in conjunction with an internal device is quite common.

Thus it would have been obvious to one of ordinary skill in the art at the time of the claimed invention's conception to modify the implanted neurostimulator with an external programmer due to the commonality of such a combination and to provide the user with a convenient means for adjusting the stimulation parameters of the implanted device.

Response to Arguments

8. Applicant's arguments with respect to claims 1-9 and 11-29 regarding the Cimochoowski'986 and Pool'975 references have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments, see page 13, filed 27 November 2006, with respect to the rejection of claims 1-3, 25 and 27 under 35 U.S.C. §102(b) as anticipated by Bogle'557 have been fully considered and are persuasive. The rejection of claims 1-3, 25 and 27 has been withdrawn.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3762


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Flory whose telephone number is (571) 272-6820. The examiner can normally be reached on M - F 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher A. Flory

8 February 2007


George Manuel
Primary Examiner